

## LINCOLN CITY/LANCASTER COUNTY PLANNING STAFF REPORT

for March 16<sup>nd</sup>, 2005 PLANNING COMMISSION MEETING

**P.A.S.:** West Van Dorn Heights, Special Permit # 05008, Community Unit Plan

**PROPOSAL:** A Special Permit/CUP for 9 lots, including 24 Build-Through lots, generally located at S. W. 70<sup>th</sup> Street and W. Van Dorn Street.

**LOCATION:** Northeast of S. W. 70<sup>th</sup> Street and W. Van Dorn Street.

### **WAIVER REQUEST:**

1. Sidewalks
2. Street trees
3. Street lighting
4. Landscape screens.
5. Storm water detention
6. Block length
7. Preliminary Plat

**LAND AREA:** 157.27 acres, more or less

**CONCLUSION:** This is conformance with the Comprehensive Plan, Zoning and Subdivision Ordinance. The waivers are typical for rural development. The CUP provides the same information and review as would the Preliminary Plat.

<b><u>RECOMMENDATION:</u></b>
-------------------------------

Conditional Approval
----------------------

### **GENERAL INFORMATION:**

**LEGAL DESCRIPTION:** Lot 12 I.T. the SW 1/4 in Section 36, T 10 N, R 5 E of the 6<sup>th</sup> P.M., Lancaster County NE. Legal Description attached.

**EXISTING ZONING:** AG Agriculture

**EXISTING LAND USE:** Farmland and a dam.

### **SURROUNDING LAND USE AND ZONING:**

North: Ag land and two acreages, zoned AG Agriculture

South: Acreages to the southwest, Ag land to the south, zoned AG Agriculture to the south and AGR to the southwest.

East: Agriculture, Zoned AG Agriculture

West: Agriculture and one farm residence, Zoned AG Agriculture

**ASSOCIATED APPLICATIONS:** n/a

**HISTORY:** Change of zone #3367 from AG to AGR withdrawn 12/22/04.

**COMPREHENSIVE PLAN SPECIFICATIONS:** The 2025 Comprehensive Plan shows this area as Agriculture. This is in the Lincoln Growth Tier II. Clustering is permitted by special permit in the AG district. Build Through is required.

**UTILITIES:** There are no utilities or water districts in the area.

**TOPOGRAPHY:** Gently rolling hills, falling off to the north and east.

**TRAFFIC ANALYSIS:** W. Van Dorn is a paved county road. S.W. 70<sup>th</sup> and W. "A" streets are gravel county roads.

**PUBLIC SERVICE:** This area is served by the Lincoln Public School District #1, the South West Rural Fire District, and is in the Norris Public Power District service area.

**REGIONAL ISSUES:** Clustering and Build-through.

**ENVIRONMENTAL CONCERNS:** The 1862 Nebraska City Steamwagon Road ran through or close to this parcel. The soil rating is approximately 5.87. This is not prime agriculture soil. There is no FEMA flood plain recorded on the site. There is a large farm pond and a water way across the land from northwest to east. Wetlands could be expected at these locations. There was an identified 16 acre parcel of Native Hay in the parcel to the north of this application. No animal feeding operations were identified in the immediate area.

**AESTHETIC CONSIDERATIONS:** n/a

**ALTERNATIVE USES:** Farming or 7, 20+acre parcels.

**ANALYSIS:**

1. This request is for a Build Through Community Unit Plan to cluster 9 acreage lots. Private, gravel, internal streets are proposed. Individual water and sewer is proposed. A bonus is being requested for clustering.
2. This request is in conformance with the Comprehensive Plan.

3. As requested by the County Board, no scoring is provided on this application.

4. The density calculations for the project are as follows;

157.27 acres of AG at 0.055 dwelling per acre	=	8.54 dwellings
Bonus for cluster/BTA X 1.20	=	10.24 dwellings

Permitted	10 dwellings
-----------	--------------

Requested	9 units on 9 lots
-----------	-------------------

Note; The shadow plat provides for 24 future buildable lots.

5. The water report shows adequate quantity and quality.

6. This design includes provisions for Build Through in the area of new development.

7. This design reflects the normal adjustments to accomplish a cluster style of acreage subdivision through the CUP.

8. Waivers are requested for street lights, sidewalks, block length, street trees, storm drainage, and screening. These are typical waivers requested, provided for and appropriate for agriculture/acreage clusters. Yards are adjusted from AG to AGR standards as part of the cluster. Recent amendments no longer required the waiver for street lights, screening, sidewalks and street trees. Storm drainage for Acreages meet the city standards.

9. The County Engineer's memo of February 25 notes several issues and corrections.

10. The Lincoln/Lancaster County Health Department note groundwater review must be completed and the two existing wells properly decommissioned.

11. Public Works Department notes several issues and corrections.

### **CONDITIONS:**

#### **Site Specific:**

1. This approval permits 9 dwelling units, including 24 dwelling units as such time as the area is annexed by the City of Lincoln and rezoned.

2. If any final plat on all or a portion of the approved community unit plan is submitted five (5) years or more after the approval of the community unit plan, the city may require that a new community unit plan be submitted, pursuant to all the provisions of section 26.31.015. A new community unit plan may be required if the subdivision ordinance, the design standards, or the required improvements have been amended by the city; and as a result, the community unit plan as originally approved does not comply with the amended rules and regulations.
3. Before the approval of a final plat, the public streets, private roadway improvements, drainage facilities, land preparation and grading, sediment and erosions control measures, drainageway improvements, temporary turnaround and barricades, and street name signs, must be completed or provisions (bond, escrow or security agreement) to guarantee completion must be approved by the City Law Department. The improvements must be completed in conformance with adopted design standards and within the time period specified in the Land Subdivision Ordinance.
4. Permittee agrees:
  - 4.1. to complete the surfacing of private roadway, and temporary turnarounds and barricades located at the temporary dead-end of the private roadways shown on the final plat within two (2) years following the approval of this final plat.
  - 4.2 to complete the installation of the street name signs within two (2) years following the approval of the final plat.
  - 4.3 to complete any other public or private improvement or facility required by Chapter 26.23 (Development Standards) of the Land Subdivision Ordinance in a timely manner which inadvertently may have been omitted from the above list of required improvements.
  - 4.4 to submit to the Director of Public Works a plan showing proposed measures to control sedimentation and erosion and the proposed method to temporarily stabilize all graded land for approval.
  - 4.5 to complete the public and private improvements shown on the Community Unit Plan.
  - 4.6 to retain ownership of or the right of entry to the outlots in order to maintain the outlots and private improvements on a permanent and continuous basis and to maintain the plants in the medians and islands on a permanent and continuous basis. However, the subdivider may be relieved and discharged of this maintenance obligation upon creating, in writing, a permanent and continuous association of property owners who

would be responsible for said permanent and continuous maintenance. The subdivider shall not be relieved of such maintenance obligation until the private improvements have been satisfactorily installed and the documents creating the association have been reviewed and approved by the City Attorney and filed of record with the Register of Deeds.

4.7 to agree to the future conversion of lots to a higher density, including timing of annexation, funding of infrastructure cost, and agreement to petition for special assessment districts and that this is designed for future platting to a density of about 450 dwellings and for future subdivision of the acreage lots, said agreement and deed restrictions to be reviewed and approved by the City Attorney and filed of record with the Register of Deeds.

4.8 to submit to the lot buyers and home builders a copy of the soil analysis.

4.9 to pay all design, engineering, labor, material, inspection, and other improvement costs except those cost the City Council specifically subsidizes as follow:

4.10 to comply with the provisions of the Land Preparation and Grading requirements of the Land Subdivision Ordinance.

4.11 to protect the trees that are indicated to remain during construction and development.

4.12 to properly and continuously maintain and supervise the private facilities which have common use or benefit, and to recognize that there may be additional maintenance issues or costs associated with providing for the proper functioning of storm water detention/retention facilities as they were designed and constructed within the development, and that these are the responsibility of the land owner.

4.13 to relinquish the right of direct vehicular access to S 70<sup>th</sup> Street except for W. Benelli Lane and three access to O. L. "B" and one access to Lot 1 Blk 4. To relinquish the right of direct vehicular access to W. Van Dorn except at W. Remington Drive.

4.14 to maintain County roads until the County Board specifically accepts the maintenance.

4.15 to submit to all potential purchasers of lots a copy of the ground water report.

General:

5. Before receiving building permits:

5.1 The permittee shall complete the following instructions and submit the documents and plans to the Planning Department office for review and approval.

5.1.1 A revised site plan including 5 copies showing the following revisions:

5.1.1.1 Make the revisions noted in the County Engineers memo of February 25, 2005.

5.1.2 Make the revisions in the Public Works memo of March 4, 2005.

5.1.3 Show the "Build-Through" lots in Lot 1, Blk 4.

5.1.4 Show the future half mile road off S. W. 70 and off Van Dorn.

5.1.5 Show the flood pool elevation of the pond.

5.1.6 Add a note that the outlot is designed for future platting to a density of about 460 dwellings and for future subdivision of the acreage lots.

5.1.7 Show the tree masses.

5.1.8 Add to Outlot "B" that it is reserved for future residential development..

5.1.9 Adjust the lots to show the Urban Reserve at 75% of the Parcel area.

5.1.10 Amend note # 10 to delete Lot 9 and note Outlot "B" and Block 4 Lot 1.

5.1.11 Revise and note the street section to BTA Road Standard.

5.1.12 Amend note #12 to reflect the preliminary plat.

5.1.13 Amend note #3 to reflect BTA.

5.1.14 Show a drainageway, future storm sewer and future sanitary sewer easement along the creek in Outlot "B".

5.1.15 A permanent final plan with 5 copies as approved.

5.2 The construction plans comply with the approved plans.

- 5.3 Final plat(s) is/are approved by the City.
- 5.4 The required easements as shown on the site plan are recorded with the Register of Deeds.

**STANDARD CONDITIONS:**

- 6. The following conditions are applicable to all requests:
  - 6.1 Before occupying this Community Unit Plan all development and construction is to comply with the approved plans.
  - 6.2 Before occupying these dwellings City/County Health Department is to approve the water and waste water systems.
  - 6.3 All privately-owned improvements, including landscaping and recreational facilities, are to be permanently maintained by the owner or an appropriately established homeowners association approved by the City.
  - 6.4 The site plan accompanying this permit shall be the basis for all interpretations of setbacks, yards, locations of buildings, location of parking and circulation elements, and similar matters.
  - 6.5 This resolution's terms, conditions, and requirements bind and obligate the permittee, its successors and assigns.
  - 6.6 The applicant shall sign and return the letter of acceptance to the City Clerk within 30 days following the approval of the special permit, provided, however, said 30-day period may be extended up to six months by administrative amendment. The clerk shall file a copy of the resolution approving the special permit and the letter of acceptance with the Register of Deeds, filling fees therefor to be paid in advance by the applicant.

Prepared by

---

Mike DeKalb, 441-6370, [mdekalb@lincoln.ne.gov](mailto:mdekalb@lincoln.ne.gov)

**DATE:** March 7, 2005

**APPLICANT:** Brian D. Carstens  
Brian D. Carstens and Associates  
601 Old Cheney Road, Suite 'C'  
Lincoln, NE 68512  
(402) 434-2424

**OWNER:** Layne, L.L.C.  
C/O Aspen Builders  
1640 Normandy Ct.  
Lincoln, NE 68512  
(402) 432-6811

**CONTACT:** Brian D. Carstens  
Brian D. Carstens and Associates  
601 Old Cheney Road, Suite 'C'  
Lincoln, NE 68512  
(402) 434-2424



# Co. Special Permit #05008

## West Van Dorn Acres Community Unit Plan

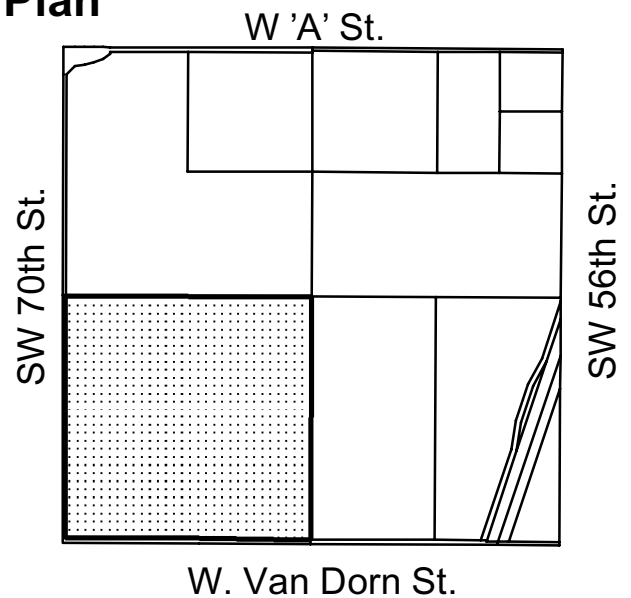
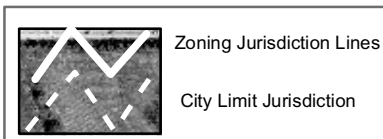
### SW 70th St. & West Van Dorn

2002 aerial

#### Zoning:

- R-1 to R-8 Residential District
- AG Agricultural District
- AGR Agricultural Residential District
- R-C Residential Conservation District
- O-1 Office District
- O-2 Suburban Office District
- O-3 Office Park District
- R-T Residential Transition District
- B-1 Local Business District
- B-2 Planned Neighborhood Business District
- B-3 Commercial District
- B-4 Lincoln Center Business District
- B-5 Planned Regional Business District
- H-1 Interstate Commercial District
- H-2 Highway Business District
- H-3 Highway Commercial District
- H-4 General Commercial District
- I-1 Industrial District
- I-2 Industrial Park District
- I-3 Employment Center District
- P Public Use District

One Square Mile  
Sec. 36 T10N R5E



FEB 17 2005

OUTLET OF  
EAST A.C.

[illegible]

**CLIMATE DATA**

**Appendix 2**

**2014-2015**

**P** = Patient  
**M** = Mother

**Abstract**

**Dr. F. H. C. M. van der Grinten**

**BRIAN D.  
CARSTENS  
ASSOCIATES**

**RESIDENTIAL  
COMMERCIAL  
DESIGN**

OLD CHENEY ROAD  
SUITE C  
SMOOTH, NE 68112

PHONE: (408) 434-2104  
FAX: (408) 434-0667  
2005 CAPITOL, INC.

**WEST VAN  
DORN  
HEIGHTS**

**SPECIAL PERMIT**

**W. JOTH & WEST  
AN EXCITING FUTURE**

LINCOLN, NE

**RE BUILD-  
THRU SITE  
PLAN**



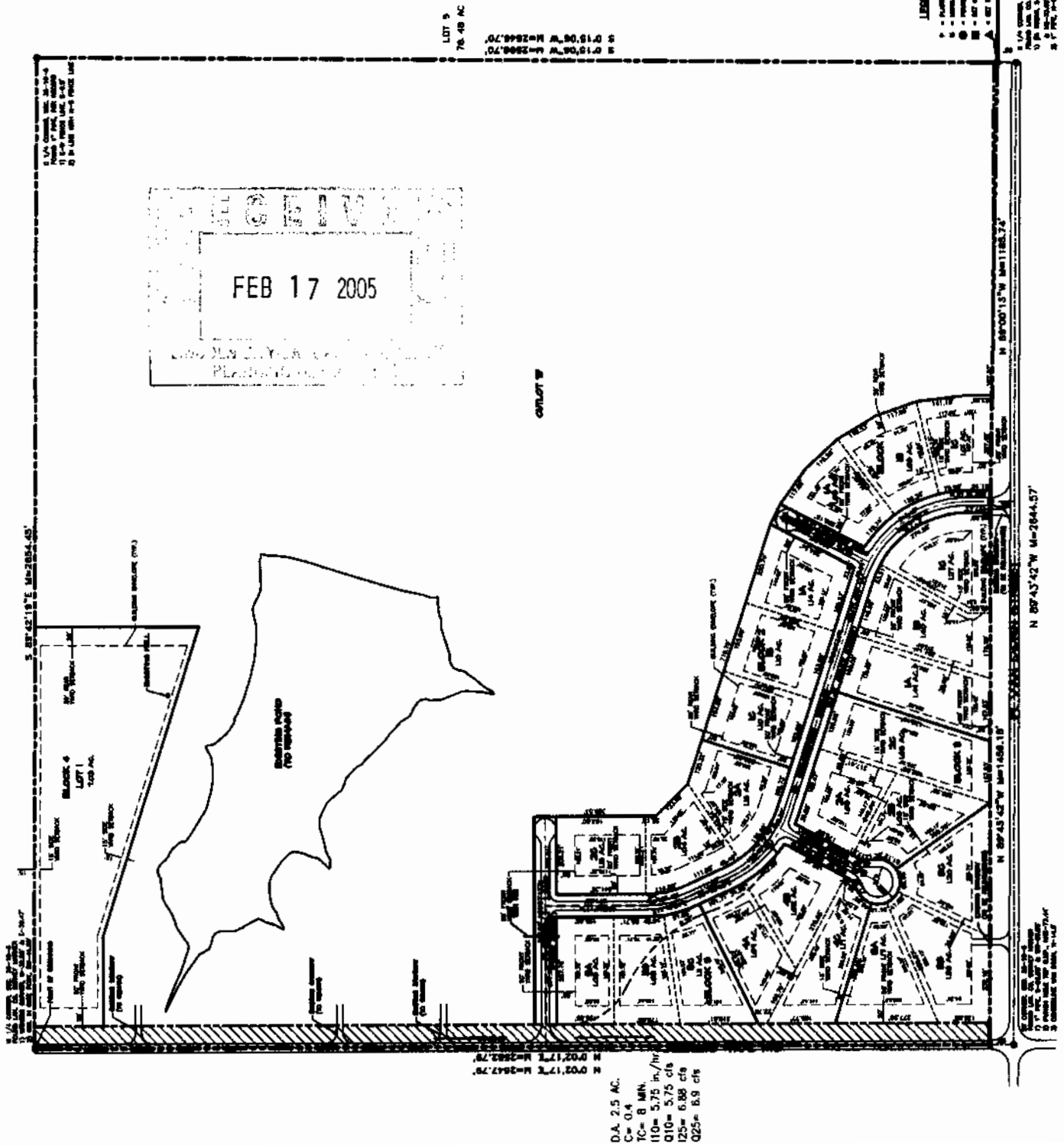
SCALE: 1"=100'

**THE UNIVERSITY OF CHICAGO**


1 OF 5



**Co. Special Permit #05008  
West Van Dorn Acres Community Unit Plan  
SW 70th St. & West Van Dorn**



# Co. Special Permit #05008 West Van Dorn Acres Community Unit Plan SW 70th St. & West Van Dorn



**BRIAN D. CARSTENS & ASSOCIATES**  
LAND USE PLANNING  
RESIDENTIAL & COMMERCIAL DESIGN

601 OLD CEMETARY ROAD  
SUITE C  
LINCOLN, NE 68512  
PHONE: (402) 434-2004  
FAX: (402) 434-2007  
WWW.BDCARSTENS.COM

**WEST VAN DORN HEIGHTS**

SPECIAL PERMIT #

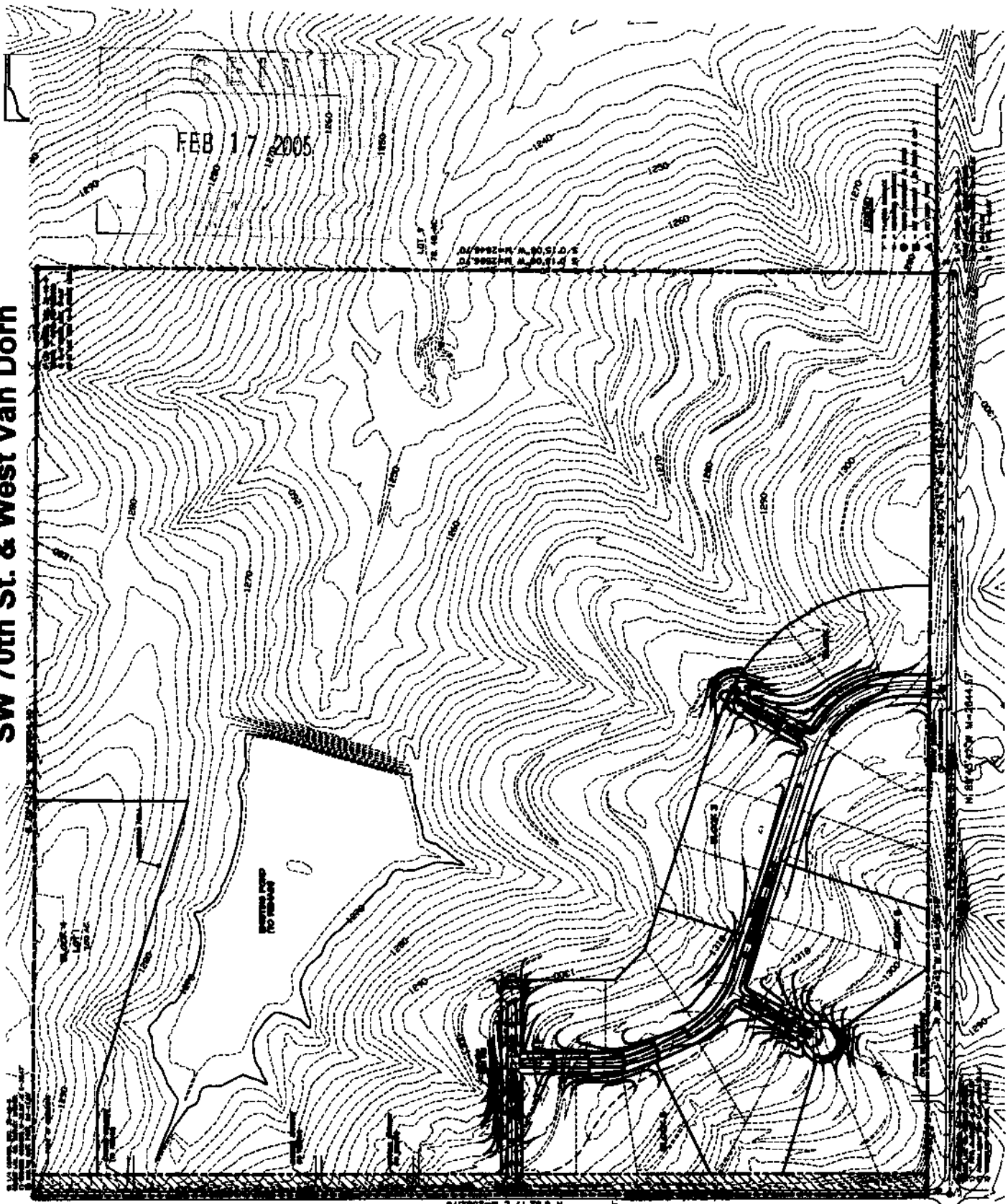
S.W. 70TH & WEST VAN DORN STREETS  
LINCOLN, NE

**GRADING PLAN**



SCALE: 1"=40'

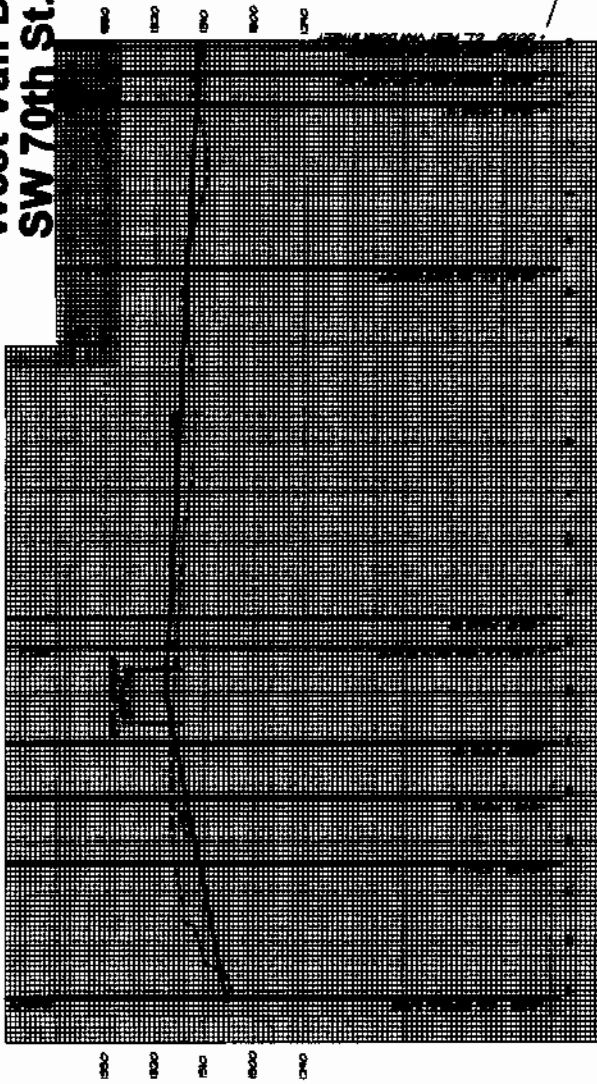
PROJECT: 05008  
DATE: 02/17/05



D.A. 2.5 AC.  
 C= 0.4  
 TC= 8 MIN.  
 I10= 5.75 m/hr  
 O10= 5.75 cfs  
 I25= 6.88 cfs  
 Q25= 6.9 cfs

N 0°02'17"E D=2882.79'  
 N 0°02'17"E D=2882.79'

# Co. Special Permit #05008 West Van Dorn Acres Community Unit Plan SW 70th St. & West Van Dorn



REMININGTON DRIVE

RECEIVED  
FEB 17 2005



BRIAN D.  
CARSTENS  
& ASSOCIATES  
LAND PLANNING  
RESIDENTIAL  
& COMMERCIAL  
DESIGN

FOR OLD CHEROKEE ROAD  
STATE OF  
LINCOLN, NE 68112  
PROJECT: WEST VAN DORN  
ACRES COMMUNITY UNIT  
PLAN, AND CHARTER  
© 2005 CARSTENS, INC.

WEST VAN  
DORN  
HEIGHTS

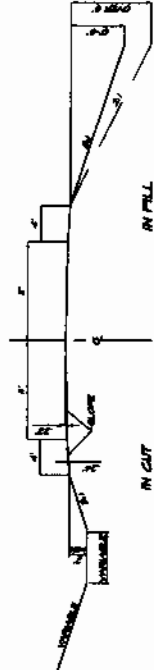
SPECIAL PERMIT  
#

S.W. 70TH & WEST  
VAN DORN STRAITS  
LINCOLN, NE

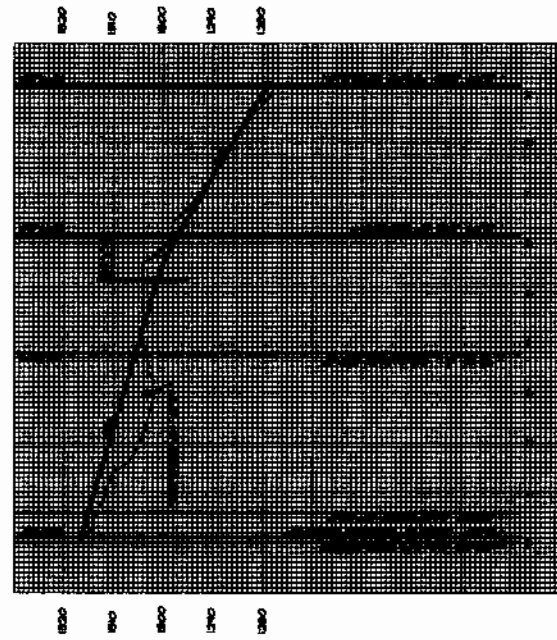
STREET  
PROFILES

SCALE:  
1"=100' HORIZ.  
1"=10' VERT.  
PROJECT NUMBER  
DATE: JANUARY  
REVISIONS

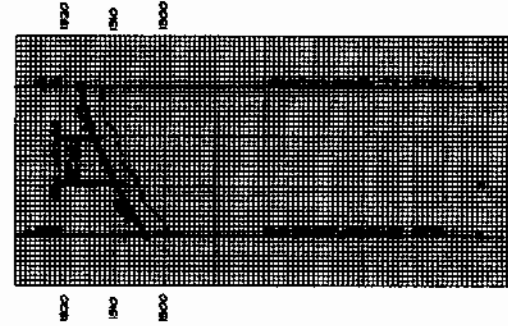
4 OF 5



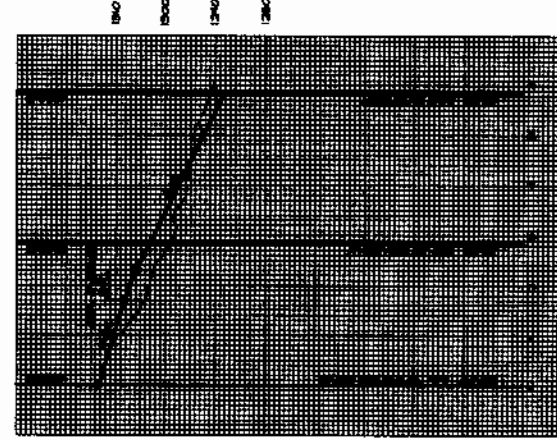
TYPICAL SECTION FOR REMINGTON DRIVE, BENELLI LANE,  
SW 64TH PLACE & SW 65TH COURT



BENELLI LANE



SW 64TH PLACE



SW 65TH STREET



**BRIAN D. CARSTEN & ASSOCIATES**  
 LAND PLANNING  
 RESIDENTIAL  
 & COMMERCIAL  
 DESIGN

401 OLD COUNTRY ROAD  
 SUITE 100  
 LINCOLN, NE 68512  
 PHONE (402) 441-1234  
 FAX (402) 441-1235  
 © 2002 CARSTEN, INC.

**WEST VAN DORN HEIGHTS**

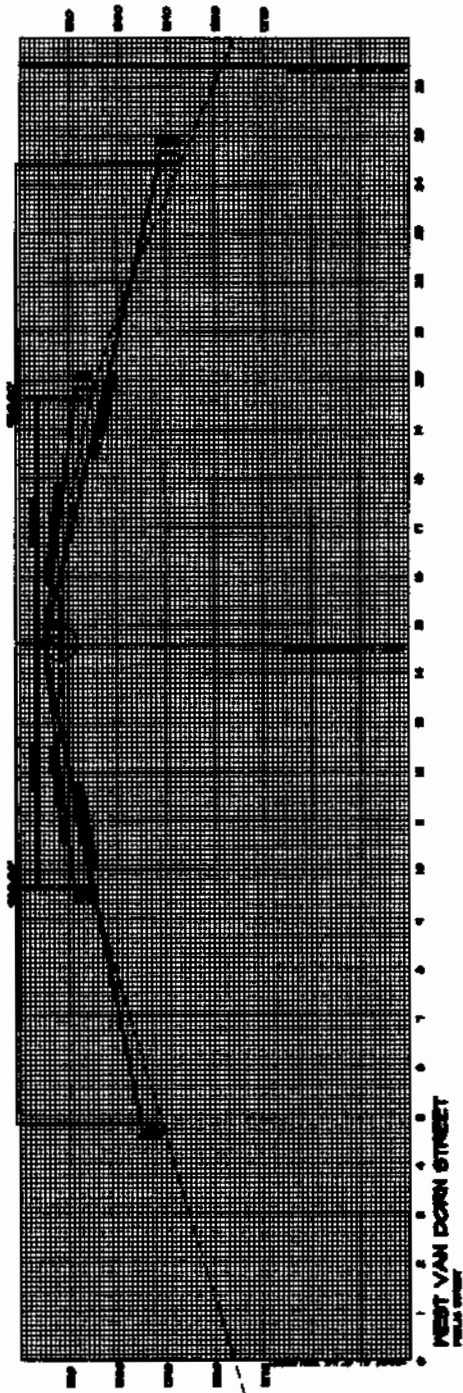
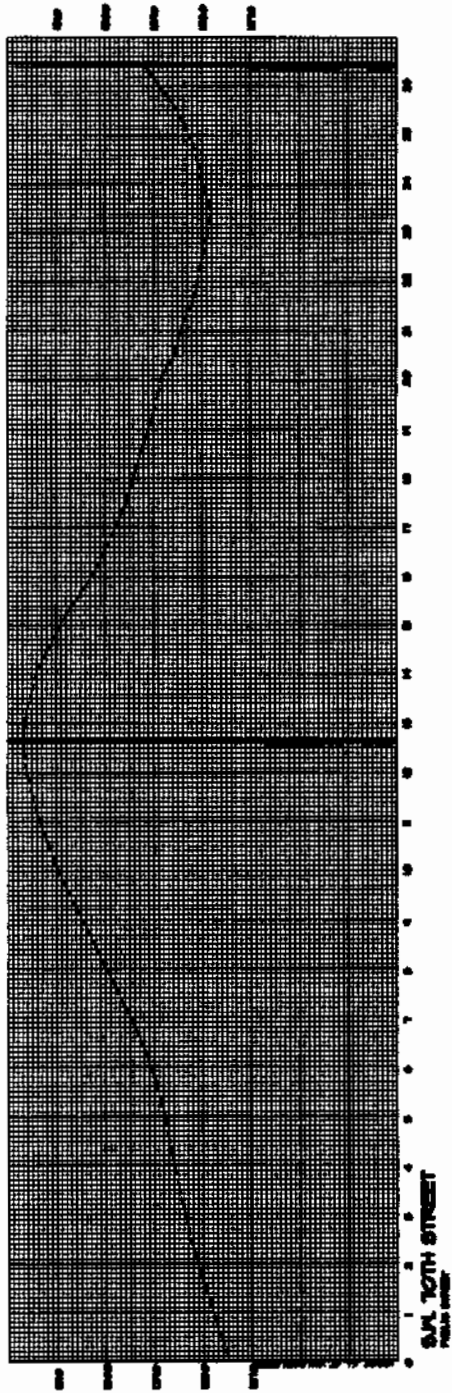
SPECIAL PERMIT  
 #

S.W. 70TH & WEST  
 VAN DORN STREETS  
 LINCOLN, NE

**STREET PROFILES**

SCALE:  
 1"=100' HORIZ.  
 1"=10' VERT.

PROJECT ADDRESS  
 DATE OF DESIGN  
 DATE OF PERMIT



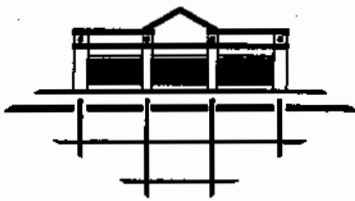
**Co. Special Permit #05008**  
**West Van Dorn Acres Community Unit Plan**  
**SW 70th St. & West Van Dorn**

FEB 17 2005

## GENERAL NOTES

1. THIS PRELIMINARY PLAT/ C.U.P. CONTAINS 157.27 ACRES MORE OR LESS.
2. THIS C.U.P. PERMITS 9 SINGLE FAMILY LOTS AND 2 OUTLOTS. EACH LOT SHALL CONTAIN A MAXIMUM OF ONE SINGLE FAMILY RESIDENCE AND OUT BUILDINGS, ALL LOCATED WITHIN THE BUILDING ENVELOPES AS SHOWN AND/ OR NOTED.
3. THE CURRENT ZONING IS 'AG' & THE PROPOSED ZONING IS 'AG' WITH C.U.P WITH A 20% DENSITY BONUS.
4. THE MAXIMUM BUILDING HEIGHT SHALL NOT EXCEED 35 FEET, AS PER 'AG' ZONING.
5. THE DEVELOPER / OR OWNER RESERVES THE RIGHT TO BUILD ANYWHERE WITHIN THE BUILDING ENVELOPES SHOWN.
6. THE DEVELOPER PROPOSES THE USE OF WELLS FOR POTABLE WATER SUPPLY.
7. THE DEVELOPER PROPOSES THE USE OF INDIVIDUAL WASTE WATER SYSTEMS. IF PERCOLATION TEST DO NOT PERMIT SUB SURFACE FIELDS, LAGOONS SHALL BE INSTALLED. WASTE WATER SYSTEMS SHALL BE APPROVED BY THE LANCASTER COUNTY HEALTH DEPARTMENT.
8. ONLY ONE SUBDIVISION GROUND SIGN SHALL BE PERMITTED FOR THIS DEVELOPMENT.
9. ALL CURVILINEAR DIMENSIONS ARE CHORD LENGTHS.
10. DIRECT VEHICULAR ACCESS TO WEST VAN DORN STREET IS HEREBY RELINQUISHED EXCEPT AT W. REMINGTON DRIVE. DIRECT VEHICULAR ACCESS TO SW 70TH STREET IS HEREBY RELINQUISHED EXCEPT AT W. BENELLI LANE AND LOT 9.
11. ALL TOPOGRAPHIC CONTOURS ARE AT NAVD 88 DATUM.
12. THE FOLLOWING WAIVERS ARE APPROVED WITH THIS C.U.P./ SPECIAL PERMIT #\_\_\_\_\_: SIDEWALKS, STREET TREES, STREET LIGHTING, LANDSCAPE SCREENING, AND BLOCK LENGTH.
13. THE DEVELOPER SHALL CONSTRUCT AND SURFACE THE PUBLIC STREETS WITH 3" OF CRUSHED ROCK AND 1" OF GRAVEL IN ACCORDANCE WITH THE LANCASTER COUNTY STANDARDS. THE COUNTY SHALL BE NOTIFIED PRIOR TO THE LAYING OF THE GRAVEL. INTERIOR INTERSECTION RADII SHALL BE 30 FEET AND THE INTERSECTION RADII AT NW 27TH STREET SHALL BE 50 FEET.
14. ONLY ONE RESIDENTIAL ACCESS SHALL BE PERMITTED PER LOT AND THIS SHALL BE IN ALL DEDICATIONS OF ANY FINAL PLATS.
15. 'JUNK CARS' SHALL BE PROHIBITED IN THIS DEVELOPMENT AS NOTED IN PROTECTIVE COVENANTS.
16. FUTURE LOT OWNERS WILL BE ADVISED THAT THIS IS A RURAL FARM AREA AND THAT NORMAL AND CUSTOMARY FARM ACTIVITIES ARE NOT A NUISANCE.
17. FARM ACCESSSES ARE FOR AGRICULTURAL USES ONLY. ANY OTHER USE WILL FORFEIT AND RELINQUISH THAT ACCESS.
18. ALL PRIVATE IMPROVEMENTS SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
19. THE DEVELOPER AGREES TO COMPLY WITH THE DESIGN STANDARDS AS IDENTIFIED IN THE LAND SUBDIVISION ORDINANCE FOR EROSION CONTROL AND SEDIMENTATION DURING AND AFTER LAND PREPARATION.
20. A WRITTEN AGREEMENT SHALL BE PROVIDED FOR THE FUTURE CONVERSION OF LOTS TO A HIGHER DENSITY, INCLUDING TIMING OF ANNEXATION, FUNDING OF INFRASTRUCTURE COST AND AGREEMENT TO PETITION FOR SPECIAL ASSESSMENT DISTRICTS.
21. ONLY ONE MAIN BUILDING IN A BUILDING ENVELOPE IS ALLOWED PER PLATTED LOT HOWEVER ACCESSORY USE BUILDINGS SHALL BE PERMITTED ON ADJACENT BUILDING ENVELOPES.

**Co. Special Permit #05008**  
**West Van Dorn Acres Community Unit Plan**  
**SW 70th St. & West Van Dorn**



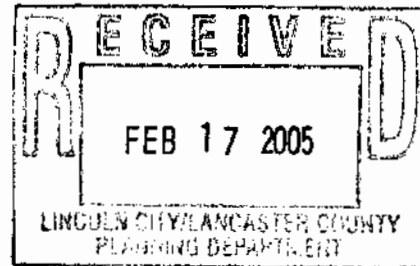
# BRIAN D. CARSTENS AND ASSOCIATES

LAND USE PLANNING RESIDENTIAL & COMMERCIAL DESIGN

601 Old Cheney Road, Suite C Lincoln, NE 68512 Phone: 402.434.2424

February 17, 2005

Mr. Marvin Krout  
Director of Planning  
Lincoln City- Lancaster County Planning Department  
555 South 10th Street  
Lincoln, NE 68508



RE: WEST VAN DORN ACRES - COMMUNITY UNIT PLAN  
West Van Dorn & S.W. 70<sup>th</sup> Street

Dear Mr. Krout,

On behalf of Layne, L.L.C., we submit the above mentioned application for your review. West Van Dorn Acres is a proposed AG/C.U.P. on approximately 157.27 acres. We are showing 9 single family acreage lots, containing a minimum of 3.01 acres. They will each have private wells and individual septic systems. The private roadway will be constructed to meet Lancaster County design standards.

We have 'clustered' 8 lots close to S.W. 70<sup>th</sup> & West Van Dorn Streets and the one other lot up in the Northwest corner of the property adjacent to the existing pond, so the that balance of the farm can continue to be farmed. We are accessing SW 70<sup>th</sup> and West Van Dorn Street.

This site is located in Tier 2 of the City of Lincoln's growth pattern. Therefore, BTA standards will apply. We have shown how each 3 acre lots will be further subdivided in the future, once City services are available. The 'development component' of the project is 25% of the area of the C.U.P., as per the BTA Ordinances.

We are requesting waivers to the Land Subdivision Ordinance to waive sidewalks, street trees, street lighting, landscape screening, block length and Preliminary Plat, as each lot is larger than 1 acre and this project will not be annexed into the City of Lincoln at this time.

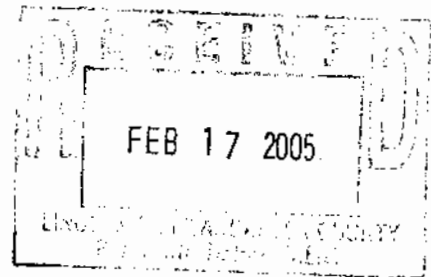
Please contact me if you have any further questions.

Sincerely,

Brian D. Carstens

cc: Layne, L.L.C.

Enclosures: 24 Copies of Sheet 1 of 5  
24 Copies of Sheet 2 of 5  
8 Copies of Sheets 3, 4 & 5 of 5  
City Application for a Special Permit  
Application Fee of \$475.00  
Certificate of Ownership  
2 Copies of Groundwater Report  
8-1/2" x 11" Reduction



**GROUNDWATER REPORT**  
**SW 70<sup>TH</sup> AND WEST VAN DORN SUBDIVISION**  
**SW1/4 SEC. 36, 10 N., R. 5 E.**  
**LANCASTER COUNTY**

**Developer: Aspen Builders**  
**Petitioner: Brian Carstens and Associates**  
**Hydrogeologist and Preparer of Report:**  
**Vincent H. Dreeszen**

**November 30, 2004**

## **Report of Groundwater Investigation**

### **Subdivision**

**SW 70<sup>th</sup> and West Van Dorn**

**SW1/4 Sec. 36, 10N., R. 5E.**

Southwest 70<sup>th</sup> and West Van Dorn is a Community Unit Plan to develop a subdivision of 9 lots in the SW1/4 36-10N-5E, Lancaster County. The plan calls for the development of 8 lots mostly in the southwest quarter of the southwest quarter of the section and one lot in the northeast quarter. A reduced plan of the site is attached. The group of 8 lots range in size from slightly more than 3 acres to one of more than 4 acres. Lot 9 in the northeast part of the subdivision consists of 8.9 acres. Lot 12 of about 156 acres is retained for agricultural use and includes a lake, of about 10 acres, on a drainage west to east across the center of the quarter section. Surface drainage is to the south-southeast toward Haines Branch of Salt Creek.

The subdivision is bounded on the west by Southwest 70<sup>th</sup> Street and on the south by West Van Dorn Street. Nearby subdivisions include Long View Estates one mile to the west, Ridge Park directly southwest and Meadow View one-half mile to the west. There is scattered housing along the south side of Van Dorn Street, the west side of Southwest 70<sup>th</sup> Street and to the

north in the same section of the subdivision (Figure 1).

Groundwater Reports describing the geology and the availability of groundwater and its quality are available for each of the nearby subdivisions. A number of well logs including those for a large number of registered wells in nearby Ridge Park are also available. One well on Lot 9 in the proposed subdivision has recently been completed and that log and report of the water quality analysis is attached. Table 1 is a summary of information from selected well logs. Table 2 in the report summarizes the available ground water quality.

The only known aquifer in the area and the source of water to existing wells and to individual private domestic wells in the subdivision is the Dakota Sandstone. The Dakota in the area consists of a lower sandstone overlain by Dakota clays and thin sandstones. Glacial till overlies the Dakota red, white and yellow clays. The top of the Dakota is an eroded surface. The Dakota is underlain by limestone and shales of Pennsylvanian Age. None of the existing wells are known to have penetrated the total thickness of the Dakota. The deeper lying sandstone in this area of Lancaster County is generally brackish to highly saline. Most local well drillers are aware of the salinity problem so they construct wells only to depths necessary to obtain the desired yield for a domestic supply. The depth of wells is largely dependent upon surface elevations at the well site. The attached plat map of the subdivision includes a topographic map. It is

expected that most wells in the subdivision will be similar in depth to the well in Lot 9 and the other wells shown in Table 1 (Summary of Well Logs) ie., 240 to 270 feet. Based on the available water quality information, wells drilled to mean sea level depths of less than 1035 to 1040 feet should yield adequate water with low salinity. Note that one well in Ridge Park was completed to a depth referred to mean sea level of 1026 feet.

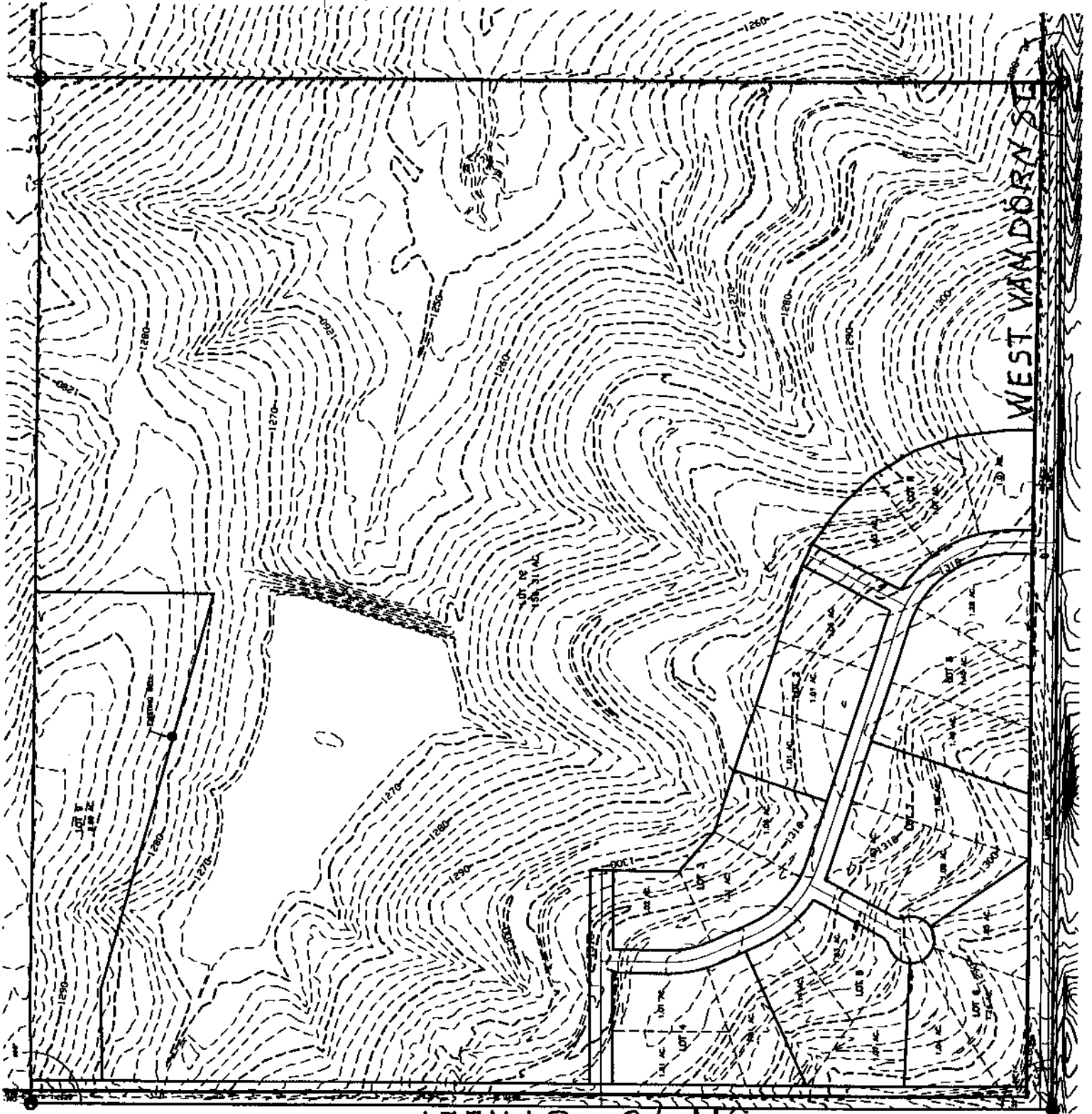
The depth to water is also dependent largely upon elevations of the land surface. The water in the Dakota is "confined" and represents a potentiometric surface. That surface slopes from about 1190 feet above msl in the southwest corner of the section to about 1175 in the southeast corner and 1160 in the northeast corner. The groundwater divide between Salt Creek to the north and Haines Branch to the south lies along West Van Dorn Street. Groundwater in the proposed subdivision moves toward discharge in Salt Creek Valley lowlands and side slopes.

The Dakota Sandstone is a major groundwater reservoir containing a substantial quantity of water that is replenished annually from precipitation. Water levels will fluctuate to some degree and will respond primarily to climatic conditions. The total saturated thickness as measured from water levels to base of wells appears to average about 130 to 150 feet. Thicknesses of sandstone range considerably from about 10 feet to more than 50 feet. Reported well yields range from 10 gpm to some wells over 100 gpm in wells that were test pumped with air.

Based upon available information wells in the 8 lots in the southwest portion of the development should be capable of yielding 10 to 20 gpm.

Available water quality information indicates the water can be expected to be potable for wells in the proposed development with total dissolved solids of about 500 to 600 gpm, hardness of about 250 to 440 ppm, sodium from about 45 to 100 ppm, chloride of less than 50 to about 90 ppm, sulfates from about 60 to 90 ppm and iron and manganese from about 0.3 to 0.4 each. Ph is generally about 7.5 and Nitrate-N is less than 0.1 ppm. The water is quite hard and iron concentrations in excess of 0.3 ppm and manganese in excess of 0.2 ppm can cause staining on fixtures and clothes. Most home owners will probably choose to condition their water for household use with water softeners and filtration.

In summary, wells yielding an adequate quantity of potable water should be possible in the remaining lots in the proposed subdivision. A test well to determine water quantity and quality is recommended before home construction on any of the lots. Caution should be exercised with regard to salinity for any well drilled below the mean sea level depth of about 1040 feet.

$$Z \leftarrow$$


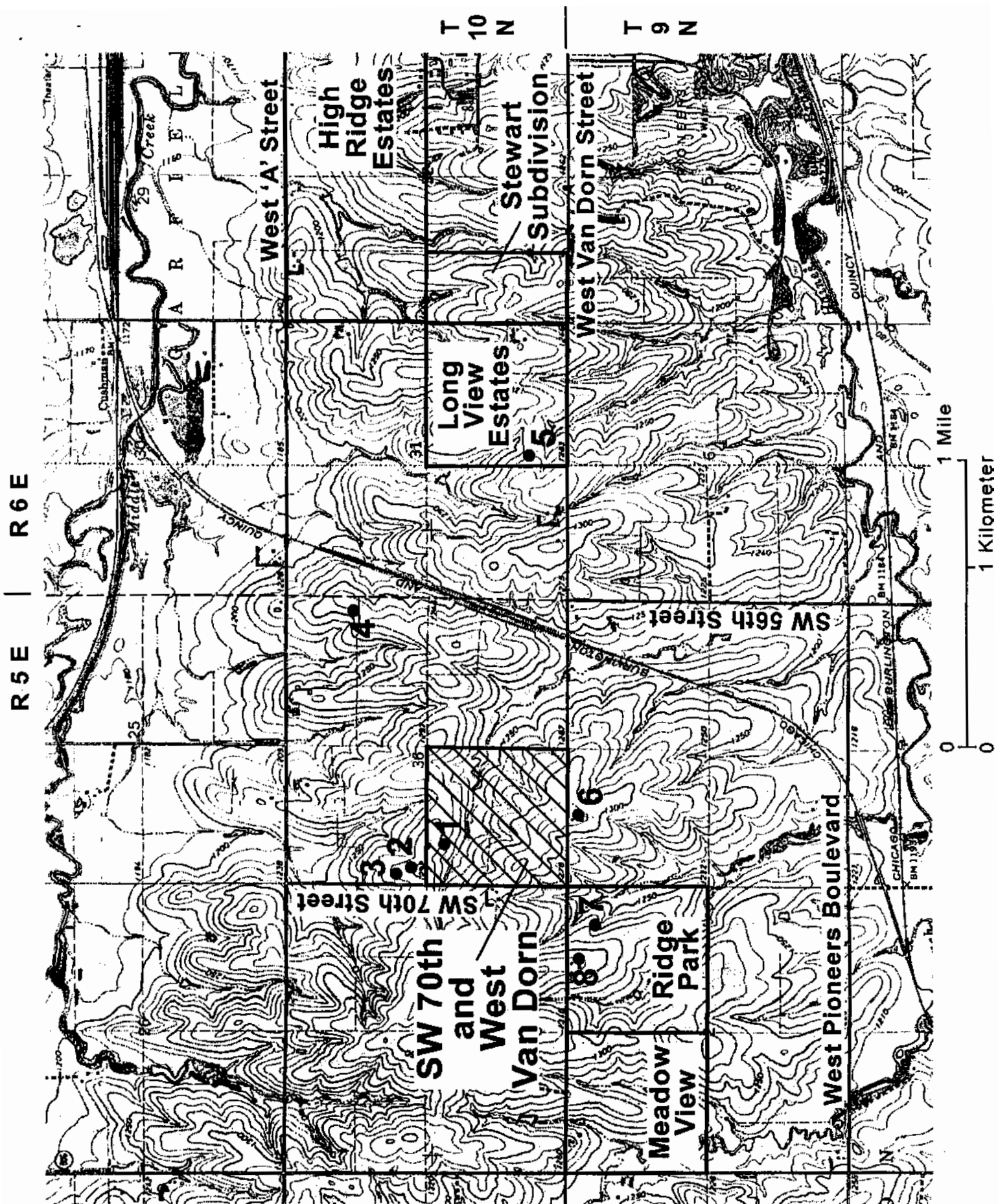


Figure 1. Map showing location of SW 70th and West Van Dorn and nearby subdivisions. Wells, referred to in text and on tables, shown by dot and number.

# WATER WELL DATA SHEET

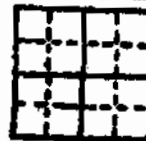
DATE: 10/6/04 COUNTY: LANCASTER

OWNER: ASPEN BUILDERS INC

DRILLER: Harry Weitz

ELEVATION: 1282

PERMIT # (LPS-040171)



0 - 2	TOPSOIL	Lot 9
2 - 30	CLAY, YELLOW & BROWN	SW 70th & WEST VAN DORN
30 - 162	CLAY, BLUE	NW 1/4 SW 1/4 36-10N-5E
162 - 202	SHALE, RED & YELLOW	
202 - 242	SANDSTONE, LT. BROWN, FINE	

T.O. No., R. 5, Sec. 36

Submitted For  
ASPEN BUILDERS INC.

SAMPLE MARKED  
1

LABORATORY NUMBER  
04704343

Submitted By  
Aspen Builders, Inc  
1640 Normandy Ct, Ste A.  
Lincoln, NE 68512

DATE RECEIVED  
27-Oct-2004

DATE REPORTED  
29-Oct-2004

ANALYSIS OF CHEMICAL PROPERTIES			YOUR RESULTS			RATING OF YOUR RESULTS		
			UNIT OF MEASURE	RESULT	LBS/ ACRE FOOT	SATISFACTORY	POSSIBLE PROBLEM	PROBABLE PROBLEM
WATER CHARACTERISTICS	pH		---	7.6	---			
	Hardness		---	224.6	---			
	(For Overhead Sprinkler Only)			328.8	894.9			
	Bicarbonate	ppm		0.0	0.0			
IMPACT ON GENERAL PLANT GROWTH	Electrical Conductivity (ECw)	mmhos/cm		0.84	---			
	Total Soluble Salts	ppm		538	1462			
IMPACT FROM ROOT CONTACT	Sodium	meq/l		1.91	---			
	Chloride	ppm		58	157			
	Boron	ppm		0.10	0.30			
IMPACT FROM FOLIAGE CONTACT	Sodium	ppm		44.0	120.0			
	Chloride	ppm		58	157			
IMPACT ON SOIL STRUCTURE	Sodium Absorption Ratio Adj	meq/l		2.82	---			
	Electrical Conductivity (ECw)	mmhos/cm		0.84	---			
	Total Soluble Salts	ppm		538	1462			
To maintain good soil structure in arid regions, irrigation water should have the capacity to replace the soluble salts being dissolved. If the salts being dissolved are not replaced, a decrease in permeability may occur.						No anticipated difficulty with most crops.	Some difficulty for sensitive & moderately sensitive crops	Significant difficulty for most crops

ANALYSIS OF NUTRIENTS						
PLANT NUTRIENTS AS NORMALLY REPORTED IN WATER ANALYSIS	RESULTS AS PPM	NUTRIENTS CONVERTED TO BASIC FERTILIZER MATERIAL FORMS	RESULTS LB/ACRE FOOT	MEQ/LITER		
NITRATE (NO <sub>3</sub> -N)	0.01	NITROGEN (N)	0.00	CATIONS	K+	0.08
PHOSPHATE (PO <sub>4</sub> )	0.01	PHOSPHATE (P <sub>2</sub> O <sub>5</sub> )	0.02		NA+	1.91
POTASSIUM (K)	3.00	POTASH (K <sub>2</sub> O)	9.70		CA++	3.39
MAGNESIUM (Mg)	13.0	MAGNESIUM OXIDE (MgO)	58.5		MG++	1.07
CALCIUM (Ca)	68.0	CALCIUM (Ca)	185.0	ANIONS	CL-	1.63
SULFATE (SO <sub>4</sub> )	68.0	SULFUR (S)	61.2		SO4--	1.42
MANGANESE (Mn)	0.30	MANGANESE (Mn)	0.82		HCO3-	5.39
IRON (Fe)	0.40	IRON (Fe)	1.09		CO3--	0.00
BORON (B)	0.10	BORON (B)	0.30		PO4---	0.00
					NO3-	0.00

pHc 7.20  
TOTAL CATIONS 6.45  
TOTAL ANIONS 8.44  
SAR 1.28

**SW 70th and West Van Dorn Subdivision**  
Table 1. Summary of Well Logs

Well Number	Estimated Ground Altitude (msl)	Well Depth		Static Water		Dakota Formation		Well Yield gpm	Notes
		In ft.	Referred to (msl)	In ft.	Referred to (msl)	Sandstone Intervals in ft.	Sandstone Thickness in ft.		
1	1282	242	1040	99	1183	202-247	45	Est. 20	Lot 9 SW 70th and West Van Dorn
2	1300	258	1042	114	1186	226-260+	32	120 with air	Reg. #G98943 SW 1/4 Sec. 36-10N-5E
3	1290	260	1030	110	1180	230-260+	30	120 with air	Reg. #G100181 SW 1/4 Sec. 36-10N-5E
4	1260	220	1040	91	1169	200-220	20	10	Reg. #G100620 NE NE Sec. 36-10N-5E
5	1272	205	1067	99	1173	130-210+	80	50	Long View Estates SW NW SW SE Sec. 31-10N-6E
6	1312	252	1060	120	1192	215-252	37	60	NE NW NW Sec. 1-9N-5E
7	1265	239	1026	73	1192	210-245+	14+	100 with air	Ridge Park Reg. #G100803 NE NE Sec. 2-9N-5E
8	1318	271	1047	130	1188	260-271	11+	70	Ridge Park NE cor. NW NE Sec. 2-9N-5E

Note: Well locations are shown in Figure 1.

**SW 70th and West Van Dorn Subdivision**  
Table 2. Inorganic Water Quality

Well Number	Total Dissolved Solids	Total Hardness	Bicarbonate	Sodium	Calcium	Iron	Manganese	Chloride	Sulfate	Nitrate-N	pH	Notes
1	538	224.6	328.8	44	68	0.4	0.3	58	68	0.01	7.6	Lot 9 SW 70th and West Van Dorn
5	614	522	427.4	119.9	120	0.1	0.01	10	31	<0.1	7.6	Long View Estates
8	578	352	296	89	86	0.3	0.38	88	103	<0.1	7.6	Ridge Park

Note: Well locations are shown in Figure 1.

Lancaster

DON R. THOMAS - COUNTY ENGINEER


County

Engineering

Department

DEPUTY - LARRY V. WORRELL  
COUNTY SURVEYOR



**DATE:** February 25, 2005  
**TO:** Mike DeKalb  
Planning Department  
**FROM:** Larry V. Worrell   
County Surveyor  
**SUBJECT:** WEST VAN DORN HEIGHTS CUP

---

comments: This office has reviewed subject development and would offer the following

- 1) *General Note No. 10* should be revised to allow access to SW 70<sup>th</sup> Street from Lot 1, Block 4 Instead of Lot 9 and allow access for the farm drives.
- 2) *General Note No. 13* should be revised to require 50.00 feet radius returns at SW 70<sup>th</sup> Street and at West Van Dorn Street.
- 3) The radius of the interior intersections is shown as 25.00 feet on the drawing and should be 30.00 feet.
- 4) Developer will be required to install all required signs.
- 5) The existing pavement of West Van Dorn Street is shown incorrectly with respect to the section line. The centerline of the pavement is approximately 15.00 feet north of the section line. There is no SW 70<sup>th</sup> Street south of West Van Dorn Street.
- 6) Should pavement be considered, the County Engineer will determine the appropriate requirements prior to installation.
- 7) The existing right-of-way on West Van Dorn Street is based on 50.00 feet from the existing street centerline. A dedication of 10.00 feet shall be shown to provide the required 60.00 feet from the existing street centerline.
- 8) The developer shall provide the attached Exhibit B - Maintenance Responsibilities of Ditches and Drives - to all prospective buyers.

LVW/DP/bmi  
Connie/Subdiv.Wk/West Van Dorn Heights CUP

## **EXHIBIT "B"**

### **MAINTENANCE RESPONSIBILITIES OF DITCHES & DRIVES**

#### **WITHIN SUBDIVISIONS WITH GRAVEL ROADS**

- 1) All driveways must be applied for and/or approved by the County Engineer's Office.
- 2) General maintenance, i.e. mowing and keeping ditches and driveway pipes free of all obstructions (including, but not limited to, trees, shrubs, fences, gates, and wooden walkways), shall be the responsibility of the adjacent property owner. This responsibility is the designated area of public right-of-way from the edge of the road to the right-of-way line.
- 3) Any item or items found that are not permitted within the public right-of-way shall be removed by the adjacent property owner within 48 hours of notification, or the item will be removed. The cost of the removal will be the responsibility of the adjacent property owner.
- 4) Should the adjacent property owner neglect or be negligent in performing the general and requisite maintenance of driveway, driveway pipes, and ditches and damages do occur to the public roadway or the adjacent property, then that property owner shall be responsible for all damages and liabilities that occur.
- 5) Any nonconforming use or obstruction which is a danger to public safety shall be corrected within 24 hours of notification, or the cost of such correction shall be the responsibility of the adjacent property owner.
- 6) When it is determined by the County Engineer's Office that a driveway pipe or pipes have deteriorated or been damaged to a point that replacement is required, the property owner shall replace said driveway pipe within one (1) week of notification or bear the cost of said replacement.

**LINCOLN-LANCASTER COUNTY HEALTH DEPARTMENT  
INTER-OFFICE COMMUNICATION**

**TO:** Mike DeKalb

**DATE:** February 28, 2005

**DEPARTMENT:** Planning

**FROM:** Chris Schroeder

**ATTENTION:**

**DEPARTMENT:** Health

**CARBONS TO:** EH File

**SUBJECT:** West Van Dorn Acres

EH Administration

CUP #05008

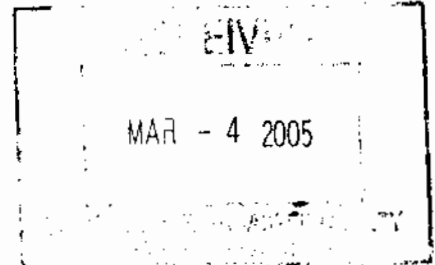
The Lincoln-Lancaster County Health Department has reviewed the proposed development with the following noted:

- The developer proposes the use of individual on-site wastewater treatment systems. The developer has adequately addressed wastewater treatment issues in the general notes.
- Two abandoned water wells exist on the property in the vicinity of W. Benelli Lane. These wells must be properly decommissioned.
- The developer proposes the use of private wells for potable water supply. A groundwater report that addresses water quantity and quality issues must be submitted.
- All wind and water erosion must be controlled during construction. The Lower Platte South Natural Resources District should be contacted for guidance in this matter.
- During the construction process, the land owner(s) will be responsible for controlling off-site dust emissions in accordance with Lincoln-Lancaster County Air Pollution Regulations and Standards Article 2 Section 32. Dust control measures shall include, but not limited to application of water to roads, driveways, parking lots on site, site frontage and any adjacent business or residential frontage. Planting and maintenance of ground cover will also be incorporated as necessary.



AREA 2  
SERVICE CENTER

R.R. 1 BOX 56  
ROCA, NEBRASKA 68430  
402/423-3855  
FAX 402/423-8090



March 3, 2005

Mike Dekalb, Project Planner  
555 S. 10<sup>th</sup> St. #213  
Lincoln, NE 68508

RE: West Van Dorn Acres

Dear Mike,

I have reviewed the subject plat. I see no easements in place. I would request our standard 10' easement along all perimeters, and 10' [ 5' each side ] of all adjoining lot lines future and present.

Thanks for your cooperation.

Sincerely,

Rick Volmer, Construction Superintendent Area 2

# Memorandum

---

<b>To:</b>	Mike DeKalb, Planning Department
<b>From:</b>	Chad Blahak, Public Works and Utilities Dennis Bartels Public Works and Utilities
<b>Subject:</b>	West VanDorn Acres CUP#05008 w/ BTA
<b>Date:</b>	3/04/05
<b>cc:</b>	

Engineering Services has reviewed the submitted plans for the West VanDorn Acres CUP, located on the northeast corner of SW 70<sup>th</sup> Street and West VanDorn Street, and has the following comments:

**Sanitary Sewer** - The following comments need to be addressed.

(1.1) Easements need to be shown with the proposed development where sanitary sewer will be required for the future subdivision of this plat.

**Water Main** - The water system is satisfactory.

**Grading/Drainage** - The following comments need to be addressed.

(3.1) The minimum flood corridor easement needs to be shown for the drainage way that runs through the site as a portion of it drains more than 150 acres.

(3.2) The grading plan needs to be revised to show the necessary lot grading to accommodate the future urban local streets and the future urban arterial sections for SW 70<sup>th</sup> and West VanDorn.

(3.3) A storm sewer easement needs to be shown from SW 69<sup>th</sup> Place to West VanDorn.

**Streets/Paving** - The following comments need to be addressed.

(4.1) Street grades meeting arterial street standards need to be shown for SW 70<sup>th</sup> Street and West VanDorn Street. The lot grading adjacent to SW 70<sup>th</sup> Street and West VanDorn needs to be revised to reflect the proposed future urban cross section.

(4.2) Adequate sight distance does not appear to be provided at the intersection of SW 70 and Benelli Lane. Information needs to be provided showing that adequate sight distance is provided.

(4.3) Information should be provided showing the possible continuation of Remington/65<sup>th</sup> Street south of VanDorn and Benelli Lane west of SW 70<sup>th</sup> Street as each location is approximately at the quarter mile point and will likely be the future median breaks.

(4.4) A build through configuration needs to be shown for Lot 1 Block 4 at the northwest corner of the plat. Also, this approximately the half mile line so a possible location for the half mile road should be

March 4, 2005

addressed with this plat. This possible road location needs to take into account the properties west of SW 70<sup>th</sup> and to the north of this plat.

**General** - The information shown on the preliminary plat relating to the public water main system, public sanitary sewer system, and public storm sewer system has been reviewed to determine if the sizing and general method providing service is satisfactory. Design considerations including, but not limited to, location of water main bends around curves and cul-de-sacs, connection of fire hydrants to the public main, temporary fire hydrant location, location and number of sanitary sewer manholes, location and number of storm sewer inlets, location of storm sewer manholes and junction boxes, and the method of connection storm sewer inlets to the main system are not approved with this review. These and all other design considerations can only be approved at the time construction drawings are prepared and approved.

F:\FILES\sieceb\Projects\2005-03-008\Word Files\wstvndmacrosBTA.wpd

**LINCOLN-LANCASTER COUNTY HEALTH DEPARTMENT  
INTER-OFFICE COMMUNICATION**

**TO:** Mike DeKalb

**DATE:** March 7, 2005

**DEPARTMENT:** Planning

**FROM:** Chris Schroeder

**ATTENTION:**

**DEPARTMENT:** Health

**CARBONS TO:** EH File

**SUBJECT:** West Van Dorn Acres

EH Administration

CUP #05008  
Water Report

The water quantity and quality report for West Van Dorn Acres indicates that adequate quantities of potable water should be available on the lots in the proposed sub-division. Most homeowners will probably choose to condition their water for household use with water softeners and filtration. The report recommends that test wells be drilled on a lot before home construction begins. Caution should be exercised with regard to salinity for any well drilled below the mean sea level depth of about 1040 feet.